

the opposed pushtabs 507. The lowermost end of attachment ring 504 is integrally molded to the uppermost end of vial 550. Complementary threads 509 and 518 on the outermost surface of thread ring 510 and the innermost surface of thread collar 517, respectively, secure closure 502 onto finish portion 501. Vertical extensions 508 interlock with pawls 515 on the innermost surface of lock ring 516. In general, operation of child resistant attachment 500 is similar to that described for child resistant attachment 100.

FIG. 10 shows a side elevation view of yet another alternative embodiment 600 of a child resistant attachment of the present invention. Again, finish portion 601 of child resistant attachment 600 is integrally molded with vial 650. Closure 602 is shown fully assembled with finish portion 601 in both FIGS. 10 and 10A. Tab collar 605 is interrupted by slots 606 to form a pair of opposed cantilevered spring-like pushtabs 607.

FIG. 10A shows a cross-sectional view of child resistant attachment 600 and vial 650 with closure 602 fully assembled onto finish portion 601, said view being taken through the opposed pushtabs 607. The lowermost end of attachment ring 604 is integrally formed with the uppermost end of vial 650. Complementary threads 609 and 618 on the innermost surface of attachment ring 604 and the outermost surface of thread ring 617, respectively, releasably secure closure 602 onto finish portion 601. Vertical extensions 608 interlock with pawls 615 on the innermost surface of lock ring 616. In general, operation of child resistant attachment 600 is similar to that described for child resistant attachment 200 shown in FIGS. 4 and 4A.

FIG. 11 shows a side elevation view of still another alternative embodiment 700 of a child resistant attachment of the present invention. As with the embodiments 500 and 600 of FIGS. 9 and 10, respectively, finish portion 701 of child resistant attachment 700 is integrally molded with bottle 750. Child resistant attachment 700 is shown in FIG. 11 with its closure 702 unassembled to finish portion 701. Operation of child resistant attachment 700 is generally similar to that described for child resistant attachment 100 shown in FIGS. 1-3A.

FIG. 11A shows a cross-sectional view of closure 702 unassembled from finish portion 701 and with the lowermost end of attachment ring 704 of finish portion 701 integrally molded to the uppermost end of a preform 750'. This represents an intermediate condition which occurs in the production process. Preform 750' is further processed by polymer processing means typically referred to as injection/blow molding or reheat/blow molding to form a finished bottle, such as the bottle 750, shown in FIG. 11.

Child resistant attachments of the present invention may be used with a variety of pharmaceutical or other containers. It is believed that the package designs and processes described herein and their attendant advantages will be understood from the foregoing description. It will, of course, be apparent to those skilled in the art that various changes may be made in form, construction, and arrangement without departing from the spirit and scope of the invention, and it is intended to cover in the appended claims all such modifications that are within the scope of this invention.

What is claimed is:

1. A child resistant attachment for a container suitable for storing and dispensing potentially dangerous material, said attachment being resistant to opening by

children yet readily openable by adults, said child resistant attachment comprising:

(a) a finish portion having a closure securement ring, said closure securement ring having an innermost surface and an outermost surface, said closure securement ring including a first means for rotatably and releasably securing a closure to said closure securement ring on at least one of its surfaces, a downwardly extending attachment ring for attaching said finish portion to said container, and an annular collar having interior, exterior, uppermost and lowermost surfaces, said annular collar being generally concentrically aligned with said closure securement ring, interrupted by at least one pair of slots, thereby forming at least one resiliently deformable cantilevered pushtab having a lowermost end and an uppermost end, said push tab having an exposed surface contour which generally conforms to the contour of said exterior surface of the adjacent portions of said annular collar to minimize the chance of inadvertent depression thereof when said annular collar is grasped, said pushtab having a vertical extension projecting above said uppermost surface of said annular collar, said uppermost end of said pushtab being inwardly movable relative to the rest of said annular collar when a squeezing force is applied to said uppermost end of said pushtab; and

(b) a closure having a first skirt having an innermost and an outermost surface, said first skirt including on at least one of its surfaces second means complementary to said first means for rotatably and releasably securing said closure to said closure securement ring on said finish portion and a second skirt external to first skirt, said second skirt having an innermost and an outermost surface, said closure also having at least one interlocking pawl on the innermost surface of said second skirt, said interlocking pawl being so shaped and positioned that it will deflect said vertical extension of said resiliently deformable pushtab when said closure is rotatably secured onto said finish portion, but will prevent removing said closure from said finish portion by rotating said closure in a reverse direction unless said resiliently deformable cantilevered pushtab on said annular collar is first depressed to disengage said pushtab vertical extension from said interlocking pawl.

2. The child resistant attachment of claim 1, wherein said attachment ring includes a securement means which mates with a corresponding securement means on said container so as to resist separation of said child resistant attachment from said container, especially by children, once said child resistant attachment is fully assembled onto said container.

3. The child resistant attachment of claim 2, wherein said securement means permits unlimited 360° rotation of said child resistant attachment relative to said container about a vertical axis passing through the center of said child resistant attachment while maintaining said finish portion securely attached to said container, thereby further frustrating attempts by children to gain access to the material in said container.

4. The child resistant attachment of claim 1, wherein said first and second means for rotatably and releasably securing said closure to said closure securement ring comprises complementary screw threads, wherein said annular collar includes two pairs of slots, thereby form-